

FINDING OF NO SIGNIFICANT IMPACT TENNESSEE VALLEY AUTHORITY

RPT PARTNERSHIP LLC (THE BLUFFS SUBDIVISION) — SECTION 26a APPROVAL OF PROPOSED FLOATING COMMUNITY BOAT DOCKS AND SHORELINE STABILIZATION — WATAUGA RIVER MILE 7.2 RIGHT BANK BOONE RESERVOIR, SULLIVAN COUNTY, TENNESSEE

The applicant, RPT Partnership LLC (RPT), proposes to construct water use facilities associated with The Bluffs Subdivision (The Bluffs), a residential development, on an upland area adjacent to Boone Reservoir, at Watauga River Mile 7.2 right bank. The proposal involves constructing three separate sets of covered floating community boat slips fronting the applicant's 1,200 feet of shoreline. These slips would provide mooring for a total of 60 boats. Each set of boat slips would measure 244 feet by 30 feet and with their hinged walkways, would extend 50 feet lakeward into Boone Reservoir. The slips would be used by homeowners within The Bluffs. The applicant also proposes to install riprap shoreline stabilization at two locations, each about 200 feet long, where the shoreline is eroding. The community docks would be accessible via a golf cart path excavated down the bluff from a common area lot within the subdivision to an old railroad bed along the shoreline. Excess spoil material from construction of the golf cart path would be used to achieve final grades in low-lying areas within the proposed subdivision above the bluff face.

The proposed boat slips and shoreline stabilization require approval under Section 26a of the *Tennessee Valley Authority (TVA) Act*. The full scope of TVA's environmental review of this proposal includes the boat slips, shoreline stabilization, the golf cart path to access the shoreline, and the sinkhole spoil disposal area. The U.S. Army Corps of Engineers (USACE) prepared an environmental assessment (EA) of the proposed action, which is incorporated by reference. TVA was a cooperating agency in the preparation of this EA.

The EA evaluates three alternatives: (1) the No Action Alternative, (2) the Applicant's Proposed Action, and (3) the Applicant's Proposed Action With Added Special Conditions. Under the No Action Alternative, no community docks or shoreline stabilization would be constructed, and no actions requiring TVA approval would occur. Under either Action Alternative, TVA would issue approval under Section 26a of the TVA Act necessary to construct the desired waterfront facilities. The two Action Alternatives differ in the number of special conditions and mitigation measures imposed to reduce potential environmental impacts; many of the conditions included in Alternative 3, the preferred alternative, are standard requirements for TVA permits.

The Bluffs residential development, located less than 3 miles from Johnson City, is consistent with local and county zoning laws and applicable ordinances. The Sullivan County Regional Planning Commission approved a plat of The Bluffs on August 31, 2007. The subdivision plat was found to comply with the subdivision regulations for Sullivan County, Tennessee.

Impacts Assessment

Ecological conditions in Boone Reservoir have rated poor since TVA monitoring began in 1991. Most of the shoreline fronting the RPT property is naturally occurring limestone rock. Turbidity and sedimentation impacts from the cart path and dock construction and erosion from boating in the area would be short term and localized. Water quality impacts would be minor and would not contribute to making conditions in the reservoir significantly worse. A construction storm water permit would be obtained by the applicant from Tennessee Department of Environment and Conservation (TDEC) to address best management practices (BMPs) and use of nonstorm water-related contingencies to ensure that discharges from upland construction operations are minimized or eliminated.

In accordance with authorization of a TDEC Class V Injection Well Permit (attached), issued on November 7, 2006, eight sinkholes on The Bluffs site were closed by installation of an inverted rock filter on top of competent material and covered by soil fill to filter/retard surface water infiltration. One sinkhole (#9), close to the golf cart path, remains open to receive surface water runoff from several acres of the development; guidelines were provided in the TDEC permit authorization to RPT to establish BMPs for protecting these features. Contingent upon RPT adhering to conditions of its Class V Injection Permit, potential direct and indirect impacts on groundwater would be avoided or minimized.

TVA determined that impacts to unique natural features such as geologic features, and wetlands were either nonexistent or minor and insignificant. The project would not result in a significant change in water-related recreational boating traffic volumes or congestion or a decrease in safety. Impacts to navigation would be insignificant. Consistent with Executive Order 11988, TVA considers these docks and riprap to be repetitive actions in the floodplain that would result in minor impacts. Existing noise levels would not significantly increase. BMPs would be implemented to control fugitive dust and, in accordance with its storm water and injection well permits, minimize sediment transport off site and into the Watauga River (Boone Reservoir). No federally or state-listed as threatened or endangered species would be adversely affected by the project. By letter dated August 14, 2008, the U.S. Fish and Wildlife Service (USFWS) indicated that requirements under Section 7 of the *Endangered Species Act of 1973*, as amended, are fulfilled. By letter dated July 22, 2008, in response to its review of the draft EA, the Tennessee Historical Commission (THC) reaffirmed its previous finding that the project area contains no historic properties listed or eligible for listing in the National Register of Historic Places (NRHP).

Design features for the covered boat slips would include the use of only selected natural color schemes. Lighting of the dock structures would be designed to reduce the amount of light seen across the nighttime landscape, yet make the structures visible to boaters. The initial construction cut for the golf cart path over the crest of the bluff is expected to result in substantial adverse visual impacts; however, plantings of native hardwood and evergreen trees of a required size and spacing would mitigate the long-term aesthetic impacts to this portion of the cart path. Of the original tree plantings, a survival rate of at least 60 percent five years after planting would be required.

Public and Intergovernmental Review

On October 12, 2007, USACE and TVA issued Joint Public Notice (JPN) 07-88A to advertise the proposed work. The JPN was distributed to a wide list of interested parties, which included federal, state, and local agencies, elected officials, private/public organizations, news agencies, commercial navigation interests, adjacent property owners, and individuals. Comments were received from the USFWS, TDEC, THC, and 12 private citizens.

On July 15, 2008, TVA released the draft EA to 26 individuals representing various federal, state, and local agencies and private citizens. In addition, the draft EA was posted on the TVA Web site. The 30-day comment period closed on August 15, 2008. Comments on the draft EA were received from the applicant, one private citizen, TDEC (Divisions of Recreation Education Services, Remediation, and Water Supply), Tennessee Wildlife Resources Agency (TWRA), USFWS, First Tennessee Development District, Tennessee Department of Transportation, and THC. All relevant issues raised in these comments have been addressed, as appropriate, in the attached EA.

Mitigation and Special Permit Conditions

In addition to adherence to general and standard conditions for water quality protection contained in the Section 26a approval and measures included in the TDEC Class V Injection Permit, TVA's approval is contingent on adherence to the following special conditions:

1. While also avoiding upward light transmission as indicated in Condition No. 2 below, RPT must install and maintain lighting and reflective tape on the floating dock structures in accordance with U.S. Coast Guard (USCG) guidelines, so that the facilities do not present a navigation hazard at night. RPT must not use red or green lights. The USCG may be reached at the following address and telephone number: Commander, Eighth Coast Guard District, Hale Boggs Federal Building, 501 Magazine Street, New Orleans, LA 70130-3396, Telephone (314) 539-3900.
2. All exterior lighting will be accomplished by utilizing shielded "dark sky" fixtures in order to eliminate upward light transmission that adds night sky brightness and to reduce the amount of light seen across the night landscape. Fixtures will be fully shielded or will have internal low-glare optics such that no light is emitted from the fixture at angles above the horizontal plane. Shielded lighting will reduce the effective number of total lumens by 35 percent. Area lighting poles must be less than 40 feet in height. Any nighttime construction activity may require temporarily retrofitting floodlights and other fixtures with external visors and side shields.
3. All color schemes for roofs on community dock facilities must be visually compatible with natural background colors and are in a dark green, black, or brown range.
4. Along the area associated with excavation and grading of the golf cart path over and down the bluff face, four rows of trees to provide a vegetative buffer paralleling the path shall be planted. The applicant will plant one row of trees approximately in the center of each of the four 10-foot-wide benches; two on each side of the cart path (see cross section of path in Appendix B). A mixture of native hardwood (red and white oak) and evergreen (eastern white pine, shortleaf pine, and eastern red cedar) tree species must be planted. No one species may comprise more than 40 percent of the total trees planted. These trees will be balled and burlapped, a minimum of 10 feet to 12 feet high

when planted, reach a mature height of a minimum of 25 feet, and shall be spaced at a maximum of 8 feet apart. Stockpiled topsoil from the site (i.e., from cart path or road construction) will be used to backfill all tree pits. Work on the cart path cut at the bluff crest must be timed for completion in the early fall. All trees will be planted in the fall immediately following the completion of all ground-disturbing activities. Of the original tree plantings, a survival rate of at least 60 percent five years after planting will be required.

Conclusion and Findings

TVA has independently reviewed the USACE EA and found it to be adequate. TVA is therefore adopting this EA. TVA has determined that the approval under Section 26a of the TVA Act for the proposed community docks and shoreline stabilization project would not be a major federal action significantly affecting the quality of the environment. Accordingly, an environmental impact statement is not required. This finding of no significant impact is contingent upon adherence to the permit conditions and completion of the mitigation measures described above and in the attached USACE EA.



October 14, 2008

Daniel H. Ferry, Senior Manager
Environmental Services and Programs
Office of Environment and Research
Tennessee Valley Authority

Date Signed

Attachment: TDEC Class V Injection Well Permit Application Approval dated November 7, 2006

RECEIVED APR 23 2008



STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
WATER SUPPLY
9th Floor, 401 Church Street
Nashville, Tennessee 37243

November 7, 2006

Mr. Gerald Thomas
RPT Partnership, LLC.
P.O. Box 4806
Johnson City, Tennessee 37602

RE: Class V Injection Well Permit Application Approval
The Cliffs at Boone Lake, Sullivan County, Tennessee
UIC File: SUL 0000077

Mr. Thomas:

The Division of Water Supply has reviewed your submittal of an Application for Authorization for a permit to discharge storm water runoff into a sinkhole located at The Cliffs at Boone Lake property located on Rangewood Road, Sullivan County. The Division considers your application complete.

The Division agrees with your approach to using riprap, straw bales and silt fence as a means of erosion and sediment control. The Division also agrees with your proposed use of a standpipe with an inverted rock filter system consisting of boulders, shot rock, and stone in sinkhole number nine and the use of an inverted rock filter system consisting of boulders, shot rock, and stone in the eight other sinkholes.

While the area is stabilized sediment and erosion control measures should be installed according to the guidelines in the Tennessee Erosion and Sediment Control Handbook. It will be necessary to install the silt fence and straw bales along the entire edge of the sinkhole and around any potential conduit that the water may use to enter the ground water prior to any construction. It should be noted that silt fences are used as temporary diversion features and generally have a life expectancy of three (3) months. The silt fence and straw bales must remain in place and in good working condition throughout the entire development of the property, and until the disturbed area has been stabilized.

All straw bales shall be placed in a single row, with ends of adjacent bales tightly abutting on another. The barrier shall be entrenched and backfilled. A trench shall be excavated the width of a bale and the length of the proposed barrier to a minimum depth of four (4) inches. After the bales are staked and chinked, the excavated soil shall conform to the ground level on the down gradient side and shall be built up to four (4) inches against the up gradient side of the barrier.

Mr. Thomas
The Cliffs at Boone Lake
UIC File: SUL 0000077
November 7, 2006
Page 2

After every storm event the entire silt fence must be inspected and any needed repairs done at that time. Should any damage occur due to traffic or any other activity the fence must be repaired before the end of each workday.

Straw bale barriers shall be inspected immediately after each rainfall and at least daily during prolonged rainfall. Necessary repairs to barriers or replacement of bales shall be accomplished promptly. Sediment deposits must be removed when the level of deposition reaches approximately one-half the height of the barrier. Any sediment deposits remaining in place after the straw bale barrier is no longer required should be dressed to conform to the existing grade prepared and seeded. Please note that the banks are steep and an alternative stabilization method may be required. If the area cannot be stabilized by normal methods then a new proposal for soil stabilization is to be submitted.

At no time can a karst feature be used as a sediment trap. All sinkholes and other karst features are to remain free from silt and protected from erosion.

This Division will require a minimum of seven- (7) working days advance notice before the construction on the karst area is to begin to allow for a witness from this Division to be present.

If at any time during the clearing or construction of the property other karst features are discovered then all work around the area is to stop. Erosion control devices straw bales and silt fence are to be placed and this Division is to be notified within twenty-four (24) hours of the discovery.

Extreme caution should be used in the filling and construction of commercial or residential properties on or in a sinkhole. A sinkhole by nature is an unstable geologic area, which has no permanent means of stabilization and is subject to times of movement and settling. This uncontrollable movement may cause some damage to any permanent structure placed on or around the karst feature. The State of Tennessee assumes no responsibility in potential consequences of building on or around filled depressions of any kind at any time.

It should be noted that the Division's review of this permit application was limited to water quality issues. The review did not include an evaluation of the property's potential to flood or of possible flooding impacts on adjacent properties due to modification of drainage patterns on karst features. The storm water management and drainage requirements of local zoning regulations should be followed.

If at any time the Division learns that a ground water discharge system may be in violation of The Tennessee Water Quality Control Act, the Division shall:

- a. Require the injector to apply for an individual permit;

Mr. Thomas
The Cliffs at Boone Lake
UIC File: SUL 0000077
November 7, 2006
Page 3

- b. order the injector to take such actions including, where required, closure of the injection well as may be necessary to prevent the violation; or
- c. take enforcement action.

All groundwater discharge activities must operate in such a manner that they do not present a hazard to groundwater.

The owner/operator shall at all times properly operate and maintain all facilities and systems of treatment and control which are installed or used by the owner/operator to achieve compliance with the conditions of this authorization. Proper operation and maintenance included effective performance, adequate funding, and appropriate quality assurance procedures.

Knowingly making any false statement on any report required by the rule may result in the imposition of criminal penalties as provided in T.C.A. 69-3-115 of the Tennessee Water Quality Control Act.

The issuance of this authorization does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, State, or local laws or regulations.

Please note that several counties and municipal governments have imposed stricter regulations on the use and treatment of karst features. Check with the local planning and zoning departments for these regulations. This authorization does not convey any authority over county or municipal governments that hold stricter regulations on karst features.

If the owner/operator becomes aware that he failed to submit any relevant facts in an authorization application, or submitted incorrect information in an authorization application or in any report to the Division, then he shall promptly submit such facts or information.

The owner/operator shall give notice to the Division as soon as possible of any planned physical alterations or additions to the authorized facility or activity, which may result in noncompliance with authorization requirements.

The authorization to discharge is limited to the sinkhole located at The Cliffs at Boone Lake property and to the development area as shown on the application. Routing of drainage to the sinkhole from any additional development in this area will require a separate application. This authorization has a fixed term not to exceed two (2) years from the date of this letter.

Mr. Thomas
The Cliffs at Boone Lake
UIC File: SUL 0000077
November 7, 2006
Page 4

The owner/operator is not authorized to discharge after the expiration date. In order to receive authorization to discharge beyond the expiration date, the owner/operator shall submit such information and forms as are required to the Division of Water Supply no later than 180 days prior to the expiration date.

In accordance with Underground Injection Control (UIC) Rule 1200-4-6-.14 (3) " The owner of a Class V well shall be responsible for notifying the Department of change in ownership." This notification must be made to this Division within (30) thirty days of the change in ownership.

Also note that according to Underground Injection Control (UIC) Rule 1200-4-6-.14 (8)(d) "Upon completion of the well, the owner or operator must certify to the Department that the well has been completed in accordance with the approved construction plan, and must submit any other additional information required". The certification must be submitted to the UIC Program within (30) thirty days upon the completion/closure of the Class V well.

Our concurrence with your approach does not imply that this procedure is exempt from future changes or restrictions in the Underground Injection Control (UIC) Regulations, or any additional requirements set forth by the Division in order to protect the groundwater of Tennessee.

A copy of this authorization must be kept on site until the development has been completed and must be made available to inspection personnel.

Should you have any questions or comments please feel free to contact me at (615) 532-9224.

Sincerely,



Scotty Sorrells
Geologist
UIC Program Coordinator
Division of Water Supply

c: DWS- Johnson City EFO
DWS File